clined to produce crystallized precipitates than would the equivalent amount of a single kind of acid buffer.)

(9) The 4.76% ascorbic acid gives results similar to the 0.16 M ascorbic acid except that there may be somewhat more open space around the tubular contents.

(10) The citraconic acid buffer ronds off the margins at the tubular openings and leaves a somewhat reduced amount of tubular contents appearing at the openings. Nonetheless, it leaves debris in the larger grooves.

(11) The maleic acid buffer opens and empties the tubules in some cass, and leaves a "collar" around the opening. In other areas, large quantities of material are left in the deeper grooves; the material forms mud cracks upon drying in the vacuum.

(12) The trichloroacetic acid buffer gives a strongly etched appearance, with enlarged tubular openings. It is manifestly much too potent for this application.

TABLE III

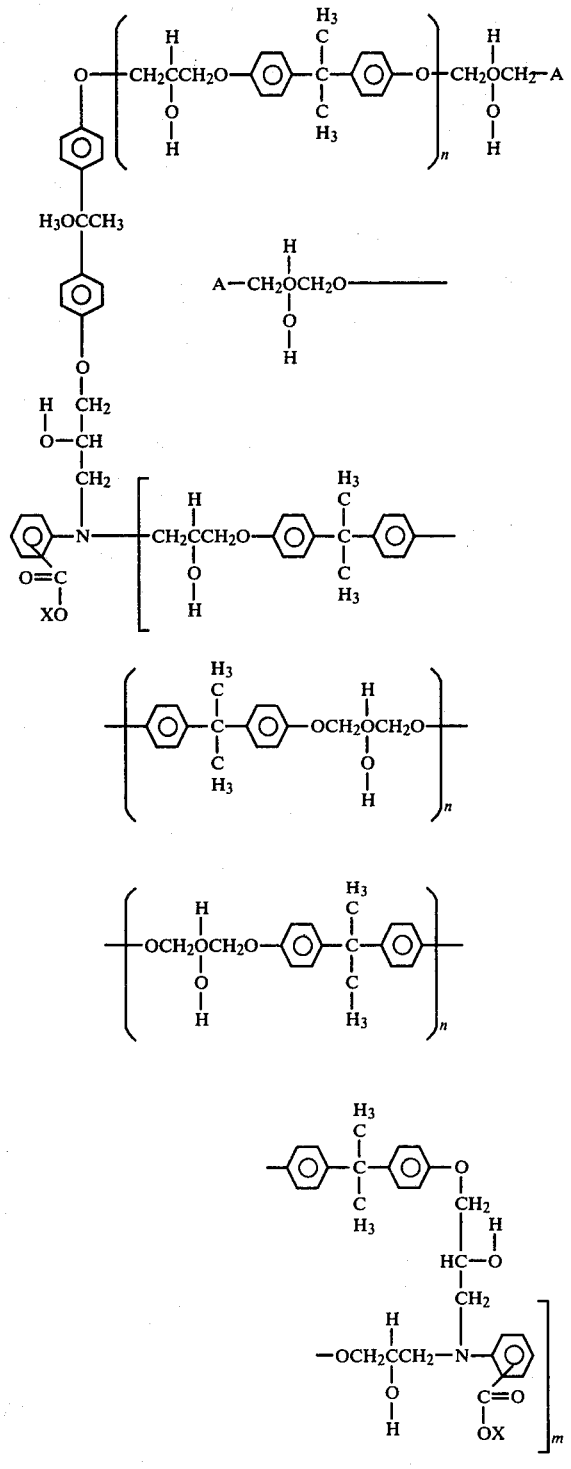
Ranking of solutions based on their subjective, apparent effects on cut dentin surfaces (replicate samples, N and U); SEM photomicrographs are coded and ranked "blind", according to the degree of change (removal and smear layer).

Original ranking	First series of samples, N	Second series, U	Average ranking	Solution number	Average mismatch
1 N	1	2	1.5	1	0.5
2 N					
2 U	2	1	1.5	2	−0.5
1 U					
4 U	3	4	3.5	3	0.5
3 N					
4 N	4	3	3.5	4	−0.5
3 U					
6 N	6	11	9.5	5	4.5
11 U					
7 U	9	7	6.0	6	0.0
9 N					
8 N	8	6	7.0	7	0.0
7 N					
6 U	7	5	9.0	8	1.0
5 U					
9 U	11	9	7.5	9	−1.5
10 U					
8 U	10	10	10.0	10	0.0
11 N					
10 N	5	8	7.0	11	−4.0
5 N					
12 U	12	12	12.0	12	0.0

It should be understood that the foregoing disclosure emphasizes certain specific embodiments of the invention and that all modifications or alternatives equivalent thereto are within the spirit or scope of the invention as set forth in the appended claims.

I claim:

1. A method of improving the adhesion of a resin or composite material to a solid surface capable of binding polyvalent cations which comprises applying to the surface prior to application of the resin or composite material a polyfunctional surface-active comonomer comprising a compound of the formula



where A is a monomer polymerizable by free radical polymerization, X is a univalent metal cation or hydrogen, m is an integer which may vary between 0 and 10, n is an integer which may vary between 0 and 2, and the aminobenzoate structure